[18] WHEN the panel reading reaches approximately 0.3 psi,

THEN place the P-100 local pump switch in the "OFF" position.

#### OR

WHEN the site tube indicates that the container is approximately 90% full, THEN place the P-100 local pump switch in the "OFF" position.

- [19] Unplug the compressor to the bubbler system.
- [20] OPEN the bleed valve (HV-100D) to allow the portion of the hose near the camlock fitting to drain.
- [21] CLOSE the valve (HV-100E) located below the one-inch camlock fitting.
- [22] Unhook the transfer hose from the camlock fitting. Walk-down the hose to ensure that any excess water remaining in the hose is drained into the trailer-mounted container. Ensure that the camlock end of the transfer hose remains higher than the container fill hole when draining excess water into the container.
- [23] Insert and secure the trailer-mounted container fill cap into the fill hole.
- [24] CLOSE the bleed valve (HV-100D).
- [25] Replace the six-inch cap that covers the one-inch camlock fitting.
- [26] Replace the six-inch cap that covers the bleed valve and sample port.
- [27] Transport the trailer-mounted container from the Collection Well to the Building 891 truck dock or to the east bay door near the 891 sump.

## 6.2 Transfer Instructions

## **Operator**

- [1] Back the trailer mounted tank up to the CWTF east overhead door. Chock the trailer tires.
- [2] Attach the transfer hose to the trailer tank discharge fitting. The fitting is located at the bottom rear of the trailer mounted tank. Lock the fitting in place.



- [3] Place the discharge end of the transfer hose over the building sump grate. Ensure the discharge end of the hose remains over the sump grate.
- [4] Open the appropriate manual inlet valve for the selected influent tank:
  - For T-200, OPEN HVA-200, Influent to T-200.
    Ensure that HVA-201 and HVA-202 are CLOSED.
  - For T-201, OPEN HVA-201, Influent to T-201.
    Ensure that HVA-200 and HVA-202 are CLOSED.
  - For T-202, OPEN HVA-202, Influent to T-202.
     Ensure that HVA-200 and HVA-201 are CLOSED.
- [5] Confirm that HV-107 (P-107 outlet) and HV-108 (P-108) valves are open.
- [6] Ensure that P-107 and P-108 control switches are in "AUTO". The auto switch is in panel FP-107 Sump Pump Panel. The panel is located along the North wall above the sump.
- [7] Remove the tank fill cap to allow the air pressure to equalize allowing the tank to drain.
- [8] Open the trailer mounted tank discharge valve. Allow the tank contents to drain into the sump. Water will be transferred into influent tank T-200, T-201 or T-202, depending on the selection made in step [4].
- [9] Close the discharge valve when the sight tube on the trailer mounted tank indicates the is tank is empty.
- [10] Replace the tank fill cap.
- [11] Disconnect the drain hose from the trailer mounted tank, ensuring that any remaining water in the hose drains into the sump.
- [12] Remove the "Hazardous Waste" label from the trailer mounted tank.
- [13] Record the date, time and volume of water transferred in the CWTF Logbook and on the CWTF Receiving Water Tracking Log (Appendix 5), as applicable.



# 7.0 INSTRUCTIONS—FRENCH DRAIN SUMP

Groundwater collected in the 881 Hillside French Drain Sump (891COLWEL) is pumped via pipeline to the appropriate CWTF influent tank. The French Drain Sump is equipped with a bubbler system which is used to determine the depth of the water in the sump. Operators energize the bubbler system prior to activating either P-101/P-102. The bubbler panel pressure reading will be periodically monitored and pumps P-101/P-102 will be manually turned off when the pressure reaches approximately 1.5 psi. The bubbler panel pressure reading can be converted to depth by multiplying the reading (psi) by 2.31 (ft/psi) to obtain feet of water in the well.

Two submersible pumps (P-101 and P-102) are installed at the French Drain Sump. P-101 and P-102 pump water collected in the French Drain Sump via piping to tanks (T-200, T-201 and T-202) at the CWTF.

Originally, the French Drain Sump was operated in the "AUTOMATIC" mode. One of the pumps was automatically turned on when the rising water level in the French Drain Sump reached eight feet and was automatically turned off when the falling water level in the sump reached four feet. The second pump was activated only if the first pump was not able to keep up with the flow into the sump or if the first pump was not operating.

Presently, the French Drain Sump pumps P-101 and P-102 can only be operated in the "MANUAL" mode because of concern that leaving the bubbler system on continuously might strip volatile organic compounds (VOCs) from the French Drain Sump water. The operational mode of the pumps (P-101 and P-102) is controlled by properly setting three separate switches for each pump. The following table lists the pump switch names, locations and possible settings.

Label/Name	Location	Possible Setting
FP-101 MCC breaker	Electrical room of Building 891, west wall	"ON" or "OFF"
P-101, Main PLC switch	Electrical room of Building 891,	"HAND", "OFF", or "AUTO"
P-102, Main PLC switch	beneath the Allen Bradley touch- screen	
P-101, local pump switch P-102, local pump switch	At the French Drain Sump	"JOG", "OFF", or "AUTO"

# 7.1 Collection

When the French Drain Sump is operated in the "MANUAL" mode, pumps P-101 and P-102 operate regardless of the French Drain Sump water level or position of the P-101 and P-102 Main PLC switches in the Building 891 electrical room. When operating in the "MANUAL" mode, the bubbler panel pressure reading is monitored periodically by the operators. The pressure reading can be converted to depth by multiplying the reading (psi) by 2.31 (ft/psi) to obtain feet of water in the well.

#### CAUTION

## OPERATE THE FRENCH DRAIN SUMP IN "MANUAL" MODE ONLY.

NOTE: The "AUTOMATIC" operation of the French Drain Sump has been <u>PURPOSELY DISABLED</u> by disconnecting the bubbler system wires and removing associated fuses from the terminal strip in Building 891. The PLC program has also been modified to eliminate "AUTOMATIC" operation.

## DO NOT OPERATE THE FRENCH DRAIN SUMP IN "AUTOMATIC" MODE

NOTE: AUTOMATIC mode = Bubbler system "ON", P-101/102 MCC breaker "ON", P-101/102 MAIN PLC switch "AUTO" and P-101/102 local pump switch "AUTO".

# **Operator**

- [1] Plug in the compressor for the bubbler system.
- [2] Record the bubbler panel pressure reading in the CWTF Logbook. Verify that the French Drain Sump has greater than 3.5 feet of water for pumping by multiplying the bubbler panel pressure reading by 2.31 ft/psi. (Note: 1.5 psi is equivalent to approximately 3.5 feet of water.)

#### WARNING

Confined space entry procedures in accordance with 1-E36-HSP-06.04 may be required to perform this evolution.

[3] IF the bubbler panel is out of service,

THEN measure the French Drain Sump water level using the portable level measuring instrument.

- [A] Drop the sensor through the valve vault drain. (Note that the maximum allowable reading is two feet above the bottom of the vault because overflow from the French Drain cleanouts occurs when the water level reaches 2.4 feet above the bottom of the vault).
- [4] OPEN the appropriate manual inlet valve at the influent tank:
  - For T-200, OPEN HVA-200, Influent to T-200 Ensure that HVA-201 and HVA-202 are closed.
  - For T-201, OPEN HVA-201, Influent to T-201.
     Ensure that HVA-200 and HVA-202 are closed.
  - For T-202, OPEN HVA-202, Influent to T-202.
     Ensure that HVA-200 and HVA-201 are closed.
- [5] Place the FP-101 MCC breaker in the "ON" position.
- [6] Place the local pump switch for the pump to be operated in the "JOG" position.

#### CAUTION

With the local pump switch in "JOG", the water level in the French Drain Sump may be lowered until the pump suction is lost. Continued operation of the pump at low water levels damages the pump.

- [7] IF the leak detection monitor alarms,

  THEN immediately turn the local pump switches to the "OFF" position and notify the

  Responsible Manager/Designee.
- [8] Record the date and time that pumping began in the CWTF Logbook.
- [9] Monitor the influent tank level regularly to prevent overfilling.

#### CAUTION

Operation of the French Drain Sump Pumps (P-101, P-102) with the local pump switch in "JOG" overrides the influent tanks level controls.

[10] Monitor the French Drain Sump bubbler panel reading.

[11] WHEN the panel reading drops to approximately 1.5 psi (3.5 feet)

THEN place the P-101 and P-102 local pump switches in the "OFF" position.

## OR

WHEN the influent tank level control indicates that the tank being filled has reached the high level set-point,

THEN place the P-101 and P-102 local pump switches in the "OFF" position.

- NOTE 1 The high level set-point for both T-201 and T-202 is set at 7.7 feet. The high level set-point for T-200 is set at 132 inches.
  - [12] Record the bubbler panel pressure reading in the CWTF Logbook. The pressure reading can be converted to depth by multiplying the reading (psi) by 2.31 (ft/psi) to obtain feet of water in the well (Note: 1.5 psi is equivalent to approximately 3.5 feet of water).
  - [13] Unplug the compressor from the bubbler system.
  - [14] CLOSE the appropriate manual inlet valve at the influent tank:
    - For T-200, CLOSE HVA-200, Influent to T-200.
    - For T-201, CLOSE HVA-201, Influent to T-201.
    - For T-202, CLOSE HVA-202, Influent to T-202.
  - [15] Record the date and time that pumping stopped in the CWTF Logbook.
  - [16] Calculate the quantity of water collected from the French Drain Sump by multiplying the number of pumps in use times the pumping time (minutes) times 15 gallons per minute (15 gallons per minute is the average pumping rate for each pump). Record the quantity of water collected on the CWTF Receiving Water Tracking Log (Appendix 5).

## 8.0 INSTRUCTIONS—RECEIVING MDF, PADF AND OTHER ER WATER

Decontamination water from the MDF and PADF, as well as other ER waters are received by tanker truck for treatment at the CWTF. The Responsible Manager/Designee, using process knowledge and analytical data if available, will assess whether a particular water is acceptable for treatment at the CWTF (refer to Appendix 6, CWTF Influent Water Assessment Worksheet). Upon authorization by the Responsible Manager/Designee, the tanker truck is transported to the CWTF for off-loading into an influent tank. It is possible that water contained in a tanker truck would require pretreatment using

the skid-mounted oil-absorbent media drum prior to routing the water to a CWTF influent tank.

Receipt of this water should be recorded on the CWTF Receiving Water Tracking Log (Appendix 5) and the CWTF Influent Water Receiving Checklist (Appendix 7).

# Responsible Manager/Designee

[1] Complete the CWTF Influent Water Assessment Worksheet (Appendix 6) prior to accepting the tanker truck of water at the CWTF.

# Responsible Manager/Designee/Operator (as appropriate)

- [2] Complete the CWTF Influent Water Receiving Log (Appendix 7) as tanker truck off-loading steps are completed.
- [3] Verify that the tanker truck wheels are chocked.

## CAUTION

Influent tanks must have adequate capacity to receive water from tanker trucks.

- [4] Verify that the chosen influent tank has adequate capacity to receive the water in the tanker truck.
- [5] OPEN the appropriate manual inlet valve at the influent tank:
  - For T-200, OPEN HVA-200, Influent to T-200.
    Ensure that HVA-201 and HVA-202 are CLOSED.
  - For T-201, OPEN HVA-201, Influent to T-201.
     Ensure that HVA-200 and HVA-202 are CLOSED.
  - For T-202, OPEN HVA-202, Influent to T-202.
     Ensure that HVA-200 and HVA-201 are CLOSED.
- [6] Connect the pump discharge hose to the pump discharge outlet and to the Building 891 fill port labeled "INFLUENT TO TANKS T-200, 201 OR 202".
- [7] Connect the pump suction hose to the tanker discharge line and to the pump suction inlet.
- [8] OPEN V-103, Truck Dock Influent.

- [9] OPEN the tanker vent valve.
- [10] OPEN the discharge valve on the tanker.
- [11] Start the pump and begin the transfer of water from the truck to the appropriate influent tank.
- [12] Monitor the level of the chosen influent tank. The level of T-201 and T-202 may be monitored from the local readout or from the Allen Bradley screen. T-200 may be monitored from the local readout.
- [13] IF the pump is NOT equipped with an automatic shut off, THEN monitor the pump during transfer.
- [14] IF the pump begins to cavitate.
  THEN immediately shut the pump OFF.
- [15] WHEN the tanker is empty,
  THEN CLOSE the following:
  - Tanker truck discharge valve;
  - Tanker truck vent valve; and
  - V-103, Truck Dock Influent.
- [16] Disconnect the pump suction and discharge hoses. Collect any water that drains out of the hoses in a bucket.
- [17] Transfer the water collected in the bucket to the chosen influent tank via the Building 891 sump.
- [18] After transferring the bucket water to the appropriate influent tank, CLOSE the appropriate manual inlet valve:
  - For T-200, CLOSE HVA-200, Influent to T-200.
  - For T-201, CLOSE HVA-201, Influent to T-201.
  - For T-202, CLOSE HVA-202, Influent to T-202.

[19] Ensure that the transfer activity is recorded in the CWTF Logbook, the CWTF Receiving Water Tracking Log (Appendix 5), the CWTF Influent Water Assessment Worksheet (Appendix 6) and the CWTF Influent Water Receiving Log (Appendix 7).

## 9.0 INSTRUCTIONS—RECEIVING WATER INTO THE FLOOR SUMP AND PUMPING THE SUMP

Water from other sources is received by drums and trailer mounted tanks for treatment at the CWTF. The Responsible Manager/Designee, using process knowledge and analytical data if available, will assess whether a particular water is acceptable for treatment at the CWTF (refer to Appendix 6, CWTF Influent Water Assessment Worksheet). Upon authorization by the Responsible Manager/Designee, the water is transported to the CWTF for off-loading into an influent tank. It is possible that water contained in a tanker truck would require pretreatment using the skid-mounted oilabsorbent media drum prior to routing the water to a CWTF influent tank. Receipt of this water should be recorded on the CWTF Receiving Water Tracking Log (Appendix 5) and the CWTF Influent Water Receiving Checklist (Appendix 7).

# **Operator**

- Select a method of transferring the water from the container into the sump. These methods can [1] include gravity feed, drum pump, submersible pump and centrifugal pump. Follow the manufacturer's instruction for using the selected pump.
- Follow the steps outlined in Section 6.2 Collection Well Transfer Instructions-Operator. [2] Complete steps [3] through [6] and step [13].

## 10.0 POST-PERFORMANCE ACTIVITY

# Responsible Manager/Designee

Complete a Post-Job Review Checklist, as necessary, in accordance with the Integrated Work Control Program Manual.

Ensure that the CWTF Logbook, the CWTF Receiving Water Tracking Log, the CWTF Influent Water Assessment Worksheet and the CWTF Influent Water Receiving Checklist are forwarded to the RMRS Records Center for disposition in accordance with RMRS/RM-06.02, Records Identification, Generation and Transmittal and RMRS/RM-06.03, Records Receipt, Processing, Retrieval and Disposition.

## 11.0 RECORDS

The following documents generated during the performance of the tasks defined in this document must be copied and distributed as follows:

Processing
<u>Instructions</u>
RM transmits to
RMRS Document
Control
₹I

## 12.0 REFERENCES

Hazardous Waste Requirements Manual
Integrated Work Control Program Manual
1-E36-HSP-6.04, Confined Space Entry
RF/ER-95-0118, Consolidated Water Treatment Facility Health and Safety Plan
RMRS/RM-06.02, Records Identification, Generation and Transmittal
RMRS/RM-06.03, Records Receipt, Processing, Retrieval and Disposition.